

## 1 CLAIMS

2  
3 (1). An apparatus for introducing an additive  
4 material into a first liquid, the apparatus  
5 comprising:  
6 a first container for holding the first liquid having  
7 an opening closed by a releasable closure,  
8 a second container positioned in the first container  
9 and containing propellant fluid at a pressure greater  
10 than atmospheric pressure, and  
11 a tubular conduit having a first end communicating  
12 with the second container and a second end  
13 communicating with the first container;  
14 wherein the conduit contains an additive material  
15 adapted to be expelled from the conduit into the  
16 first liquid by the entry of the propellant fluid  
17 into the conduit on release of the releasable  
18 closure;  
19 and wherein the conduit is provided with a first  
20 valve adjacent to its second end, the first valve  
21 being adapted to prevent the passage of said additive  
22 material into said liquid when the pressure in said  
23 conduit is equal to the pressure in said liquid, and  
24 the first valve being adapted to permit the passage  
25 of said additive material into said liquid when the  
26 pressure in said conduit is greater than the pressure  
27 in said liquid.

28  
29 2. An apparatus according to Claim 1, wherein the  
30 liquid is a gel or gel-like material.  
31

a 1 3. An apparatus according to Claim 1 ~~or~~ 2, wherein  
2 the first container is a bottle having a neck, and  
3 the second container is provided on the underside of  
4 the releasable closure.

5  
6 4. An apparatus according to Claim 3, wherein the  
7 conduit extends below the surface of the first liquid  
8 in the bottle.

a 10 5. An apparatus according to Claim 1 ~~or~~ 2, wherein  
11 the first container is a can and the releasable  
12 closure is a ring pull closure.

13  
14 6. An apparatus according to Claim 5, wherein the  
15 can has a cylindrical wall and two end walls, the  
16 second container being attached to the inner surface  
17 of one of the end walls.

a 18  
19 7. An apparatus according to claim 1 ~~any preceding Claim~~,  
20 wherein a second valve is provided in the conduit  
21 adjacent to the first end of the conduit, the second  
22 valve being adapted to prevent the passage of said  
23 additive material into said second container, and the  
24 second valve being adapted to permit the passage of  
25 said propellant fluid into said conduit when the  
26 pressure in said conduit is less than the pressure in  
27 said second container.

a 28  
29 8. An apparatus according to ~~any preceding Claim~~,  
30 wherein the conduit comprises a hollow tubular member  
31 of resilient plastics material, the first valve

1 comprising a flattened end portion of the hollow  
2 tubular member, the flattened end portion comprising  
3 two opposing walls held in contact with each other by  
4 the resilience of the plastics material and adapted  
5 to move out of contact with each other when the  
6 hollow tubular member is subject to internal pressure  
7 to allow the passage of said additive material  
8 therethrough.

9

10 9. An apparatus according to Claim 8, wherein the  
11 flattened end portion is formed by applying heat to  
12 the tubular member.

13

*claimed*

14 10. An apparatus according to ~~Claim 8 or 9~~, wherein  
15 the two opposing walls are substantially planar.

16

17 11. An apparatus according to Claim 8 ~~or 9~~, wherein  
18 the two opposing walls are arcuate in transverse  
19 section, the outer surface of a first one of the  
20 opposing walls being in contact with the inner  
21 surface of the second one of the opposing walls.

22

23 12. An apparatus according to Claim 8 ~~or 9~~, wherein  
24 the flattened end portion comprises one or more  
25 transverse folds.

26

27 13. An apparatus according to Claim 8 ~~or 9~~, wherein  
28 the flattened end portion is curved, bent or rolled  
29 about a transverse axis.

30

a  
a  
1 2nd 14. An apparatus according to any one of Claims 1 to  
2 T wherein the first valve comprises a plug means  
3 adapted to be ejected from the conduit when the  
4 pressure in said conduit is greater than the pressure  
5 in said liquid.

6  
7 2nd 15. An apparatus according to Claim 7 wherein the  
8 second valve comprises a plug means adapted to be  
9 propelled along the conduit when the pressure in said  
10 conduit is greater than the pressure in said liquid,  
11 thereby causing the additive material to be ejected  
12 from the conduit.

a  
a  
a  
13  
14  
15 16. An apparatus according to ~~any one of Claims 1 to~~  
16 7 wherein the first valve comprises a poppet valve ~~or~~  
17 ~~similar~~.